

## SEQUENCE LISTING

<110> EPIDAUROS AG

<120> Polymorphisms in the human hPXR gene and their use in diagnostic and therapeutic applications

<130> D 2145 PCT-2

<140>

<141>

<160> 185

<170> PatentIn Ver. 2.1

<210> 1

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 1

tcatgtccga cgaggccg

18

<210> 2

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 2

cccacatggc tgacatgt

18

<210> 3

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 3

cccacgcagg accagatc

18

<210> 4

<211> 18

<212> DNA

<213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence  
  
 <400> 4  
 gtcttccaag cagtagga 18  
  
 <210> 5  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial  
 sequence  
  
 <400> 5  
 cagcatgggc tccagtag 18  
  
 <210> 6  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial  
 sequence  
  
 <400> 6  
 cctgtgatgc cgaacaac 18  
  
 <210> 7  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial  
 sequence  
  
 <400> 7  
 cattgaatgc aatcggcc 18  
  
 <210> 8  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial  
 sequence  
  
 <400> 8  
 gctcttggca gtgtccat 18

<210> 9  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 9  
ggaaagccca gtgtcaac 18

<210> 10  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 10  
ccatgaaacg caacgccc 18

<210> 11  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 11  
ccttgcatcc ttcacatg 18

<210> 12  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 12  
catgccgctc tccaggca 18

<210> 13  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial

## sequence

<400> 13  
cggcctcgtc ggacatga 18

<210> 14  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 14  
acatgtcagc catgtggg 18

<210> 15  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 15  
caagccaagt gttcacagtg 20

<210> 16  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 16  
cactgtgaac acttggttg 20

<210> 17  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 17  
caaggacagc agcatgacag tcac 24

<210> 18

<211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 18  
 agccaactca gccgcagc 18

<210> 19  
 <211> 12  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 19  
 aagcaggtat gg 12

<210> 20  
 <211> 12  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 20  
 aaaccagtga gt 12

<210> 21  
 <211> 12  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 21  
 ttctagtcca ag 12

<210> 22  
 <211> 12  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 22  
tttcaggtag ag 12

<210> 23  
<211> 12  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 23  
tcacaggagg gc 12

<210> 24  
<211> 12  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 24  
aggagagtga gc 12

<210> 25  
<211> 12  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 25  
ctgcagtgat ca 12

<210> 26  
<211> 12  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 26  
ttccgggtag ga 12

<210> 27  
<211> 12  
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 27

tcctagctgc ca

12

<210> 28

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 28

cttcaggtag ga

12

<210> 29

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 29

tgccagggac tt

12

<210> 30

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 30

ctgcaggtgc cc

12

<210> 31

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 31

ccacaggtgg ct 12

<210> 32  
 <211> 12  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 32  
 ccccaggtga gg 12

<210> 33  
 <211> 12  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 33  
 ctccagaccg cc 12

<210> 34  
 <211> 12  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 34  
 tcataggtga gc 12

<210> 35  
 <211> 12  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 35  
 atgcaggttc tt 12

<210> 36  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence



<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 36  
 tcaagtgctg gacttgggac 20

<210> 37  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 37  
 cccactatga tgctgacctc 20

<210> 38  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 38  
 cacatacaac cagctccctg 20

<210> 39  
 <211> 19  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 39  
 ccacatgcag gcaagactc 19

<210> 40  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 40  
 ctgaggcctc tacacatc 18

<210> 41  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial  
           sequence  
  
 <400> 41  
 aggccctgag atgttacc 18  
  
 <210> 42  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial  
           sequence  
  
 <400> 42  
 ctgggacgca aaggctagtg 20  
  
 <210> 43  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial  
           sequence  
  
 <400> 43  
 cctgttgac acggacac 18  
  
 <210> 44  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial  
           sequence  
  
 <400> 44  
 taacggcttc tgctgccttg 20  
  
 <210> 45  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial

## sequence

<400> 45  
agctctccaa atctaccctc 20

<210> 46  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 46  
ctgagttggg acctgtct 18

<210> 47  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 47  
ccaggccctt tgaacctc 18

<210> 48  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 48  
ctgctggtgc cggcctgt 18

<210> 49  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 49  
gactgggacc ttccctgg 18

<210> 50

<211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 50  
 gagcaatgcc ctgactct 18

<210> 51  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 51  
 ccctctggcc atgaagtc 18

<210> 52  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 52  
 tgcttgtgca gcctcaga 18

<210> 53  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 53  
 gctcttggca gtgtccat 18

<210> 54  
 <211> 11  
 <212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial  
sequence

<400> 54  
atctcggcct c 11

<210> 55  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 55  
gaggccgaga t 11

<210> 56  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 56  
atctcagcct c 11

<210> 57  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 57  
gaggctgaga t 11

<210> 58  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 58  
ctgaacaagg c 11

<210> 59

<211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 59  
 gccttggttca g 11

<210> 60  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 60  
 ctgaaaaagg c 11

<210> 61  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 61  
 gccttttttca g 11

<210> 62  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 62  
 ccaggggaga a 11

<210> 63  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 63  
ttctcccctg g 11

<210> 64  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 64  
ccaggtgaga a 11

<210> 65  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 65  
ttctcacctg g 11

<210> 66  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 66  
gactgtggga g 11

<210> 67  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 67  
ctccacagt c 11

<210> 68  
<211> 11  
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 68

gactggggga g

11

<210> 69

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 69

ctccccagt c

11

<210> 70

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 70

ccccctgag g

11

<210> 71

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 71

cctcaggggg g

11

<210> 72

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 72



ccccctgagg 10

<210> 73  
 <211> 10  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 73  
 cctcaggggg 10

<210> 74  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 74  
 ttctctgtgg t 11

<210> 75  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 75  
 accacagaga a 11

<210> 76  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 76  
 ttctccgtgg t 11

<210> 77  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 77  
 accacggaga a 11

<210> 78  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 78  
 actgtgagga c 11

<210> 79  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 79  
 gtcctcacag t 11

<210> 80  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 80  
 actgtaagga c 11

<210> 81  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 81  
 gtccttacag t 11

<210> 82  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 82  
gaaagcccag t 11

<210> 83  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 83  
actgggcttt c 11

<210> 84  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 84  
gaaagtccag t 11

<210> 85  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 85  
actggacttt c 11

<210> 86  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial

## sequence

<400> 86  
aagtcggagg t 11

<210> 87  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 87  
acctccgact t 11

<210> 88  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 88  
aagtcagagg t 11

<210> 89  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 89  
acctctgact t 11

<210> 90  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 90  
tgcaccccc c 11

<210> 91

<211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 91  
 ggggggatgc a 11

<210> 92  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 92  
 tgcattcccc c 11

<210> 93  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 93  
 gggggaatgc a 11

<210> 94  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 94  
 cggctgaggt g 11

<210> 95  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 95  
cacctcagcc g 11

<210> 96  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 96  
cggctcaggt g 11

<210> 97  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 97  
cacctgagcc g 11

<210> 98  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 98  
gagagcggca t 11

<210> 99  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 99  
atgccgctct c 11

<210> 100  
<211> 11  
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 100

gagagtggca t

11

<210> 101

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 101

atgccactct c

11

<210> 102

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 102

gtgtgtgcat g

11

<210> 103

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 103

catgcacaca c

11

<210> 104

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 104

gtgtgggcat g 11

<210> 105  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 105  
 catgcccaca c 11

<210> 106  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 106  
 tgggagtgc a 11

<210> 107  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 107  
 ctgcactccc a 11

<210> 108  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 108  
 tgggaatgc a 11

<210> 109  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence



<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 109  
 ctgcattccc a 11

<210> 110  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 110  
 ctttgacact a 11

<210> 111  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 111  
 tagtgtcaaa g 11

<210> 112  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 112  
 ctttggcact a 11

<210> 113  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 113  
 tagtgccaaa g 11

<210> 114  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial  
           sequence  
  
 <400> 114  
 gacactacct t 11  
  
 <210> 115  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial  
           sequence  
  
 <400> 115  
 aaggtagtgt c 11  
  
 <210> 116  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial  
           sequence  
  
 <400> 116  
 gacaccacct t 11  
  
 <210> 117  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial  
           sequence  
  
 <400> 117  
 aaggtggtgt c 11  
  
 <210> 118  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: artificial

## sequence

<400> 118  
agtggtgcg a 11

<210> 119  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 119  
tcgcagccac t 11

<210> 120  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 120  
agtggtgcg a 11

<210> 121  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 121  
tcgcaaccac t 11

<210> 122  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 122  
agtggtgcg a 11

<210> 123

<211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 123  
 ttcccgccac t 11

<210> 124  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 124  
 agtgggtggga a 11

<210> 125  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 125  
 ttcccaccac t 11

<210> 126  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 126  
 aagggggccg c 11

<210> 127  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 127  
gcggccccct t 11

<210> 128  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 128  
aaggagccg c 11

<210> 129  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 129  
gcggctccct t 11

<210> 130  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 130  
tggcagggca g 11

<210> 131  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 131  
ctgccctgcc a 11

<210> 132  
<211> 11  
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 132

tggcaaggca g

11

<210> 133

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 133

ctgccttgcc a

11

<210> 134

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 134

acaagatatt g

11

<210> 135

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 135

caatatcttg t

11

<210> 136

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 136

acaaggtatt g 11

<210> 137  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 137  
 caataccttg t 11

<210> 138  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 138  
 tccatcctgt t 11

<210> 139  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 139  
 aacaggatgg a 11

<210> 140  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 140  
 tccattctgt t 11

<210> 141  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 141  
aacagaatgg a 11

<210> 142  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 142  
cactacatgc t 11

<210> 143  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 143  
agcatgtagt g 11

<210> 144  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 144  
cactatatgc t 11

<210> 145  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 145  
agcatatagt g 11



<210> 146  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 146  
ccccccagcc t 11

<210> 147  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 147  
aggctggggg g 11

<210> 148  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 148  
cccctagcc t 11

<210> 149  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 149  
aggctagggg g 11

<210> 150  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial

## sequence

<400> 150  
aattcgccat t 11

<210> 151  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 151  
aatggcgaat t 11

<210> 152  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 152  
aattcaccat t 11

<210> 153  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 153  
aatggtgaat t 11

<210> 154  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 154  
gtgagggagc c 11

<210> 155

<211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 155  
 ggctccctca c 11

<210> 156  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 156  
 gtgagagagc c 11

<210> 157  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 157  
 ggctctctca c 11

<210> 158  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 158  
 tgagcggctg c 11

<210> 159  
 <211> 11  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: artificial  
 sequence

<400> 159  
gcagccgctc a 11

<210> 160  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 160  
tgagcagctg c 11

<210> 161  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 161  
gcagctgctc a 11

<210> 162  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 162  
cttgggtgac a 11

<210> 163  
<211> 11  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: artificial  
sequence

<400> 163  
tgtcacccaa g 11

<210> 164  
<211> 11  
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 164

cttggatgac a 11

<210> 165

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artificial sequence

<400> 165

tgtcatccaa g 11

<210> 166

<211> 345

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (83)..(277)

<400> 166

ctgaggcctc tacacatccc tgtccagtct tttcattctc tgtggttttc tcattttctag 60

tcgaagaggc ccagaagcaa ac ctg gag gtg aga ccc aaa gaa agc tgg aac 112  
Leu Glu Val Arg Pro Lys Glu Ser Trp Asn  
1 5 10

cat gct gac ttt gta cac tgt aag gac aca gag tct gtt cct gga aag 160  
His Ala Asp Phe Val His Cys Lys Asp Thr Glu Ser Val Pro Gly Lys  
15 20 25

ccc agt gtc aac gca gat gag gaa gtc gga ggt ccc caa atc tgc cgt 208  
Pro Ser Val Asn Ala Asp Glu Glu Val Gly Gly Pro Gln Ile Cys Arg  
30 35 40

gta tgt ggg gac aag gcc act ggc tat cac ttc aat gtc atg aca tgt 256  
Val Cys Gly Asp Lys Ala Thr Gly Tyr His Phe Asn Val Met Thr Cys  
45 50 55

gaa gga tgc aag ggc ttt ttc aggtagagtt acccatcagc cttcaccac 307  
Glu Gly Cys Lys Gly Phe Phe  
60 65

gtgccaccac tgaccactg ggtaacatct cagggcct 345

<210> 167

<211> 65  
 <212> PRT  
 <213> Homo sapiens

<400> 167  
 Leu Glu Val Arg Pro Lys Glu Ser Trp Asn His Ala Asp Phe Val His  
     1                    5                    10                    15  
 Cys Lys Asp Thr Glu Ser Val Pro Gly Lys Pro Ser Val Asn Ala Asp  
             20                    25                    30  
 Glu Glu Val Gly Gly Pro Gln Ile Cys Arg Val Cys Gly Asp Lys Ala  
             35                    40                    45  
 Thr Gly Tyr His Phe Asn Val Met Thr Cys Glu Gly Cys Lys Gly Phe  
     50                    55                    60  
 Phe  
   65

<210> 168  
 <211> 345  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (83)..(277)

<400> 168  
 ctgaggcctc tacacatccc tgtccagtct tttcattctc tgtgggtttc tcatttctag 60  
 tccaagaggc ccagaagcaa ac ctg gag gtg aga ccc aaa gaa agc tgg aac 112  
                     Leu Glu Val Arg Pro Lys Glu Ser Trp Asn  
                     1                    5                    10  
 cat gct gac ttt gta cac tgt gag gac aca gag tct gtt cct gga aag 160  
 His Ala Asp Phe Val His Cys Glu Asp Thr Glu Ser Val Pro Gly Lys  
                     15                    20                    25  
 tcc agt gtc aac gca gat gag gaa gtc gga ggt ccc caa atc tgc cgt 208  
 Ser Ser Val Asn Ala Asp Glu Glu Val Gly Gly Pro Gln Ile Cys Arg  
                     30                    35                    40  
 gta tgt ggg gac aag gcc act ggc tat cac ttc aat gtc atg aca tgt 256  
 Val Cys Gly Asp Lys Ala Thr Gly Tyr His Phe Asn Val Met Thr Cys  
             45                    50                    55  
 gaa gga tgc aag ggc ttt ttc aggtagagtt acccatcagc cttcacccac 307  
 Glu Gly Cys Lys Gly Phe Phe  
     60                    65  
 gtgccaccac tgaccactg ggtaacatct cagggcct 345

<210> 169  
 <211> 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 169

```

Leu Glu Val Arg Pro Lys Glu Ser Trp Asn His Ala Asp Phe Val His
 1           5           10           15
Cys Glu Asp Thr Glu Ser Val Pro Gly Lys Ser Ser Val Asn Ala Asp
          20           25           30
Glu Glu Val Gly Gly Pro Gln Ile Cys Arg Val Cys Gly Asp Lys Ala
          35           40           45
Thr Gly Tyr His Phe Asn Val Met Thr Cys Glu Gly Cys Lys Gly Phe
 50           55           60
Phe
65

```

&lt;210&gt; 170

&lt;211&gt; 345

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (83) .. (277)

&lt;400&gt; 170

```

ctgaggcctc tacacatccc tgtccagtct tttcattctc tgtggttttc tcattttctag 60
tccaagaggc ccagaagcaa ac ctg gag gtg aga ccc aaa gaa agc tgg aac 112
                        Leu Glu Val Arg Pro Lys Glu Ser Trp Asn
                        1           5           10
cat gct gac ttt gta cac tgt gag gac aca gag tct gtt cct gga aag 160
His Ala Asp Phe Val His Cys Glu Asp Thr Glu Ser Val Pro Gly Lys
          15           20           25
ccc agt gtc aac gca gat gag gaa gtc aga ggt ccc caa atc tgc cgt 208
Pro Ser Val Asn Ala Asp Glu Glu Val Arg Gly Pro Gln Ile Cys Arg
          30           35           40
gta tgt ggg gac aag gcc act ggc tat cac ttc aat gtc atg aca tgt 256
Val Cys Gly Asp Lys Ala Thr Gly Tyr His Phe Asn Val Met Thr Cys
          45           50           55
gaa gga tgc aag ggc ttt ttc aggtagagtt acccatcagc cttcaccac 307
Glu Gly Cys Lys Gly Phe Phe
        60           65
gtgccaccac tgaccactg ggtaacatct cagggcct 345

```

&lt;210&gt; 171

&lt;211&gt; 65

&lt;212&gt; PRT

<213> Homo sapiens

<400> 171

```

Leu Glu Val Arg Pro Lys Glu Ser Trp Asn His Ala Asp Phe Val His
 1           5           10           15

Cys Glu Asp Thr Glu Ser Val Pro Gly Lys Pro Ser Val Asn Ala Asp
          20           25           30

Glu Glu Val Arg Gly Pro Gln Ile Cys Arg Val Cys Gly Asp Lys Ala
          35           40           45

Thr Gly Tyr His Phe Asn Val Met Thr Cys Glu Gly Cys Lys Gly Phe
 50           55           60

Phe
65

```

<210> 172

<211> 423

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (105)..(290)

<400> 172

```

taacggcttc tgctgccttg agaggggttac acagtggctc tccagggggc tggaggctca 60

ccaggggcac gtgtgcctga gccagcctca ctgtccctgc agtg atc atg tcc gac 116
                               Ile Met Ser Asp
                               1

gag gcc gtg gag gag agg cgg gcc ttg atc aag cgg aag aaa agt gaa 164
Glu Ala Val Glu Glu Arg Arg Ala Leu Ile Lys Arg Lys Lys Ser Glu
 5           10           15           20

cgg aca ggg act cag cca ctg gga atg cag ggg ctg aca gag gag cag 212
Arg Thr Gly Thr Gln Pro Leu Gly Met Gln Gly Leu Thr Glu Glu Gln
          25           30           35

cgg atg atg atc agg gag ctg atg gac gct cag atg aaa acc ttt gac 260
Arg Met Met Ile Arg Glu Leu Met Asp Ala Gln Met Lys Thr Phe Asp
          40           45           50

act acc ttc tcc cat ttc aag aat ttc cgg gtaggaggaa ctgcacagtg 310
Thr Thr Phe Ser His Phe Lys Asn Phe Arg
          55           60

acccgaggtg tcaactgcat cttcattctc acatagaaac tgagggtccc caaggataag 370

aaacttatac aaggtcacag ctaatcagtg gtggagggta gatttgagaga gct 423

```

<210> 173

<211> 62



&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 173

```

Ile Met Ser Asp Glu Ala Val Glu Glu Arg Arg Ala Leu Ile Lys Arg
 1             5             10             15

Lys Lys Ser Glu Arg Thr Gly Thr Gln Pro Leu Gly Met Gln Gly Leu
          20             25             30

Thr Glu Glu Gln Arg Met Met Ile Arg Glu Leu Met Asp Ala Gln Met
          35             40             45

Lys Thr Phe Asp Thr Thr Phe Ser His Phe Lys Asn Phe Arg
 50             55             60

```

&lt;210&gt; 174

&lt;211&gt; 423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (105)..(290)

&lt;400&gt; 174

```

taacggcttc tgctgccttg agagggttac acagtggctc tccagggggc tggaggctca 60

ccaggggcac gtgtgcctga gccagcctca ctgtccctgc agtg atc atg tcc gac 116
                                   Ile Met Ser Asp
                                   1

gag gcc gtg gag gag agg cgg gcc ttg atc aag cgg aag aaa agt gaa 164
Glu Ala Val Glu Glu Arg Arg Ala Leu Ile Lys Arg Lys Lys Ser Glu
 5             10             15             20

cgg aca ggg act cag cca ctg gga gtg cag ggg ctg aca gag gag cag 212
Arg Thr Gly Thr Gln Pro Leu Gly Val Gln Gly Leu Thr Glu Glu Gln
          25             30             35

cgg atg atg atc agg gag ctg atg gac gct cag atg aaa acc ttt ggc 260
Arg Met Met Ile Arg Glu Leu Met Asp Ala Gln Met Lys Thr Phe Gly
          40             45             50

act acc ttc tcc cat ttc aag aat ttc cgg gtaggaggaa ctgcacagtg 310
Thr Thr Phe Ser His Phe Lys Asn Phe Arg
 55             60

acccgagggtg tcactgccat cttcattctc acatagaaac tgagggtccc caaggataag 370

aaacttatac aaggtcacag ctaatcagtg gtggagggga gatttggaga gct 423

```

&lt;210&gt; 175

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 175

Ile Met Ser Asp Glu Ala Val Glu Glu Arg Arg Ala Leu Ile Lys Arg  
 1 5 10 15

Lys Lys Ser Glu Arg Thr Gly Thr Gln Pro Leu Gly Val Gln Gly Leu  
 20 25 30

Thr Glu Glu Gln Arg Met Met Ile Arg Glu Leu Met Asp Ala Gln Met  
 35 40 45

Lys Thr Phe Gly Thr Thr Phe Ser His Phe Lys Asn Phe Arg  
 50 55 60

&lt;210&gt; 176

&lt;211&gt; 271

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (80)..(181)

&lt;400&gt; 176

gagcaatgcc ctgactctgg gctggactga gcttgtcttt gcccatgat cttgcaccac 60

acctccctcc cctccagac cgc cca ggt gtg ctg cag cac cgc gtg gtg gac 112  
 Arg Pro Gly Val Leu Gln His Arg Val Val Asp  
 1 5 10

cag ctg cag gag caa ttc acc att act ctg aag tcc tac att gaa tgc 160  
 Gln Leu Gln Glu Gln Phe Thr Ile Thr Leu Lys Ser Tyr Ile Glu Cys  
 15 20 25

aat cgg ccc cag cct gct cat aggtgagcac agcaggggggt gaggaccgt 211  
 Asn Arg Pro Gln Pro Ala His  
 30

gaggggtgatg tgaggagacc gaggttcagg gaaattgccc aagacttcat ggccagaggg 271

&lt;210&gt; 177

&lt;211&gt; 34

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 177

Arg Pro Gly Val Leu Gln His Arg Val Val Asp Gln Leu Gln Glu Gln  
 1 5 10 15

Phe Thr Ile Thr Leu Lys Ser Tyr Ile Glu Cys Asn Arg Pro Gln Pro  
 20 25 30

Ala His

<210> 178  
 <211> 962  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <223> r=g or a, m=c or a, k=g or t, n=c or deleted

<400> 178  
 tcaagtgcctg gacttggggac ttagggagggg caatggagcc gcttagtgcc tacatctgac 60  
 ttggactgaa atataggtga gagacaagat tgtctcatat ccggggaaat cataacctat 120  
 gactaggacg ggaagaggaa gcactgcctt tacttcagtg ggaatctcrq cctcagcctg 180  
 caagccaagt gtacacagtg aaaaaagcaa gagaataagc taatactcct gtcctgaama 240  
 aggcagcggc tccttggtaa agctactcct tgatcgatcc tttgcaccgg attgttcaaa 300  
 gtggacccca ggkgagaagt cggagcaaag aacttaccac caagcaggta tggtttttct 360  
 ttctttctct tttgctgggg gctgaccgcc cttcagctcc agccaaaaga tgtgtgtgaa 420  
 cacaatatata ccttctgttt gaggtcagca tcatagtggg tcgtgaatca tgttggcctt 480  
 gctgctgtct cctcatttct aggggtgaaaa aaaaaagca tgaaaacaat cacttaatgt 540  
 tgagcccat tactgatgct ctctggctct gcactagcct cctagaaaaa tcaccacagc 600  
 cttaactact gcatgagtta ccacaagtca cacatacaac cagctccctg ttacagggtc 660  
 ggagtccctg gaccacaggaa ataccacctc caaggactgk gggagctggg gactatggga 720  
 actgggatca actcagtcct gattcctttt ggctgctggg gttagtgtg gcagccccc 780  
 tgaggccaag gacagcagca tgacagtcac caggactcac cacttcaagg aggggtccct 840  
 cagagcacct gccatacccc tgcacagtgc tgccgctgag ttggcttcaa accagtgagt 900  
 tttctacctc tactattgaa agggcacctt gtcccacaga accgagtctt gcctgcatgt 960  
 gg 962

<210> 179  
 <211> 345  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <223> y=c or t, r=g or a

<400> 179  
 ctgaggcctc tacacatccc tgtccagtct ttctattctc ygtggttttc tcattttctag 60  
 tccaagaggc ccagaagcaa acctggaggt gagacccaaa gaaagctgga accatgctga 120  
 ctttgtacac tgtraggaca cagagtctgt tcctggaaag yccagtgtca acgcagatga 180  
 ggaagtcrga ggtcccaaaa tctgccgtgt atgtggggac aaggccactg gctatcactt 240  
 caatgtcatg acatgtgaag gatgcaaggg ctttttcagg tagagttacc catcagcctt 300  
 caccacgtg ccaccactga cccactgggt aacatctcag ggcct 345

<210> 180  
 <211> 417  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <223> y=c or t, s=g or c, k=g or t

<400> 180  
 ctgggacgca aaggctagtg tccccctccc cgagtcggta ggggctgggg agggaggtgg 60  
 tatggcccgg agccccaggc cgaggggccc ggaccccggt catyccccct tctgctcccc 120  
 attctctcac aggagggcca tgaaacgcaa cgcccggcts aggtgccctt tccggaaggg 180  
 cgcctgcgag atcaccggga agaccggcg acagtgccag gcctgccgcc tgcgcaagtg 240  
 cctggagagy ggcatagaaga aggagagtga gcagtgggag cgcgggcggg ccggcgccgg 300

gggtgcacggc tctgagtaag gacgtgccgt ggggtgtgkgc atgcttgtgt ggagatgcgc 360  
 gccgagtgtg cgcgtgaaca cacgtgcaca tgtgagctgg tgtccgtgtg caacagg 417

<210> 181  
 <211> 423  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <223> r=g or a, y=c or t

<400> 181  
 taacggcttc tgctgccttg agaggggttac acagtggctc tccagggggc tggagggtca 60  
 ccagggggcac gtgtgcctga gccagcctca ctgtccctgc agtgatcatg tccgacgagg 120  
 ccgtggagga gaggcgggcc ttgatcaagc ggaagaaaag tgaacggaca gggactcagc 180  
 cactggggart gcaggggctg acagaggagc agcggatgat gatcaggag ctgatggacg 240  
 ctcatgatgaa aacctttgrc acyaccttct cccatttcaa gaatttccgg gtaggaggaa 300  
 ctgcacagtg acccgaggtg tcaactgccat cttcattctc acatagaaac tgagggtccc 360  
 caaggataag aaacttatac aaggtcacag ctaatcagtg gtggagggta gatttgagaga 420  
 gct 423

<210> 182  
 <211> 415  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <223> y=c or t

<400> 182  
 ctgagttggg acctgtctat gaaagcacat gctgtctctc ctctgtccac ctcttggcat 60  
 gtgtccctagc tgccaggggt gcttagcagt ggytgcgagt tgccagagtc tctgcaggcc 120  
 ccatcgaggg aagaagctgc caagtggagc caggctcggg aagatctgtg ctctttgaag 180  
 gtctctctgc agctgcgggg ggaggatggc agtgtctgga actacaaacc cccagccgac 240  
 agtgggyggga aagagatctt ctccctgctg ccccatctgg ctgacatgtc aacctacatg 300  
 ttcaaaggca tcatcagctt tgccaaagtc atctcctact tcaggtagga catggagact 360  
 ggggtggttgg gtgtggaaaa gaactggaag tggccaggag gttcaaaggg cctgg 415

<210> 183  
 <211> 598  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <223> r=g or a, y=c or t

<400> 183  
 ctgctgggtg cggcctgtgg gctgcctccc agggagctgt cctccccctc ccateccttgc 60  
 tgccaggggac ttgcccctgc agaccagat ctccctgctg aaggggrgcg ctttcgagct 120  
 gtgtcaactg agattcaaca cagtgttcaa cgcggagact ggaacctggg agtgtggccg 180  
 gctgtcctac tgcttggaag aactgcagg tgcccagag agcctgcctg ccctggcaga 240  
 gggagggaaa cactgcagtt atgggaggaa gggagctacg ccaggatatg caggttcttg 300  
 gatggcargg caggaagatg gaatgggtgga aaacaagrtt ttggtgaggg atgattagat 360  
 cttgggtcagc ttgctgagaa gctgccccctc catyctgtta ccattccacag gtggcttcca 420  
 gcaacttcta ctggagccca tgctgaaatt ccactayatg ctgaagaagc tgcagctgca 480  
 tgaggaggag tatgtgctga tgcaggccat ctccctcttc tccccagggt aggatctccc 540

ctaggctgcc tgacatcccc ccyagcctta tctgccctcc ccaggggaagg tcccagtc 598

<210> 184  
 <211> 271  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <223> r=g or a

<400> 184  
 gagcaatgcc ctgactctgg gctggactga gcttgtcttt gcccctatgat cttgcaccac 60  
 acctccctcc cctccagacc gccaggtgt gctgcagcac cgcgtggtgg accagctgca 120  
 ggagcaattc rccattactc tgaagtccta cattgaatgc aatcggcccc agcctgctca 180  
 taggtgagca cagcaggggg tgaggacccg tgagggtgat gtgagrgagc cgaggttcag 240  
 ggaaattgcc caagacttca tggccagagg g 271

<210> 185  
 <211> 324  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <223> r=g or a

<400> 185  
 tgcttgtgca gcctcagagc agccctgagg cttgtgggtc agggcgggct gcacccacaa 60  
 tcttttctct ggctggcatg caggttcttg ttcctgaaga tcatggctat gctcaccgag 120  
 ctccgcagca tcaatgctca gcacacccag cggctgctgc gcatccagga catacacccc 180  
 ttgctacgc cctcatgca ggagttgttc ggcacacag gtagctgagc rgctgccctt 240  
 ggrtgacacc tccgagaggc agccagacc agagccctct gagccgccac tcccgggcca 300  
 agacagatgg aactgcca gagc 324

1

43